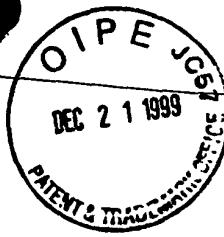


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Leu His Thr Leu Arg Val Thr Leu Val Asp Pro Asn Asn Val Leu Gln
35 40 45

Ser Trp Asp Pro Thr Leu Val Asn Pro Cys Thr Trp Phe His Val Thr
 50 55 60

Cys Asn Asn Glu Asn Ser Val Ile Arg Val Asp Leu Gly Asn Ala Glu
 65 70 75 80

Leu Ser Gly His Leu Val Pro Glu Leu Gly Val Leu Lys Asn Leu Gln
 85 90 95

Glu Leu Tyr Ser Asn Asn Ile Thr Gly Pro Ile Pro Ser Asn Leu Gly
 100 105 110

Asn Leu Thr Asn Leu Val Ser Leu Asp Leu Tyr Leu Asn Ser Phe Ser
 115 120 125

Gly Pro Ile Pro Glu Ser Leu Gly Lys Leu Ser Lys Leu Arg Phe Leu
 130 135 140

Arg Leu Asn Asn Asn Ser Leu Thr Gly Ser Ile Pro Met Ser Leu Thr
 145 150 155 160

Asn Ile Thr Thr Leu Gln Val Leu Asp Leu Ser Asn Asn Arg Leu Ser
 165 170 175

Gly Ser Val Pro Asp Asn Gly Ser Phe Ser Leu Phe Thr Pro Ile Ser
 180 185 190

Phe Ala Asn Asn Leu Asp Leu Cys Gly Pro Val Thr Ser His Pro Cys
 195 200 205

Pro Gly Ser Pro Pro Phe Ser Pro Pro Pro Pro Phe Ile Gln Pro Pro
 210 215 220

Pro Val Ser Thr Pro Ser Gly Tyr Gly Ile Thr Gly Ala Ile Ala Gly
 225 230 235 240

Gly Val Ala Ala Gly Ala Ala Leu Leu Phe Ala Ala Pro Ala Ile Ala
 245 250 255

Phe Ala Trp Trp Arg Arg Arg Lys Pro Leu Asp Ile Phe Phe Asp Val
 260 265 270

Pro Ala Glu Glu Asp Pro Glu Val His Leu Gly Gln Leu Lys Arg Phe
 275 280 285

Ser Leu Arg Glu Leu Gln Val Ala Ser Asp Gly Phe Ser Asn Lys Asn
 290 295 300

Ile Leu Gly Arg Gly Gly Phe Gly Lys Val Tyr Lys Gly Arg Leu Ala
 305 310 315 320

Asp Gly Thr Leu Val Ala Val Lys Arg Leu Lys Glu Glu Arg Thr Pro
 325 330 335

Gly Gly Glu Leu Gln Phe Gln Thr Glu Val Glu Met Ile Ser Met Ala
 340 345 350

Val His Arg Asn Leu Leu Arg Leu Arg Gly Phe Cys Met Thr Pro Thr			
355	360	365	
Glu Arg Leu Leu Val Tyr Pro Tyr Met Ala Asn Gly Ser Val Ala Ser			
370	375	380	
Cys Leu Arg Glu Arg Pro Pro Ser Gln Pro Pro Leu Asp Trp Pro Thr			
385	390	395	400
Arg Lys Arg Ile Ala Leu Gly Ser Ala Arg Gly Leu Ser Tyr Leu His			
405	410	415	
Asp His Cys Asp Pro Lys Ile Ile His Arg Asp Val Lys Ala Ala Asn			
420	425	430	
Ile Leu Leu Asp Glu Glu Phe Glu Ala Val Val Gly Asp Phe Gly Leu			
435	440	445	
Ala Lys Leu Met Asp Tyr Lys Asp Thr His Val Thr Thr Ala Val Arg			
450	455	460	
Gly Thr Ile Gly His Ile Ala Pro Glu Tyr Leu Ser Thr Gly Lys Ser			
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485	490		

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cttaaacctc cgaaagctca c atg gcg tct cga aac tat cgg tgg gag ctc	171		
Met Ala Ser Arg Asn Tyr Arg Trp Glu Leu			
1	5	10	
ttc gca gct tcg tta acc cta acc tta gct ttg att cac ctg gtc gaa	219		
Phe Ala Ala Ser Leu Thr Leu Thr Leu Ala Leu Ile His Leu Val Glu			
15	20	25	
gca aac tcc gaa gga gat gct ctc tac gct ctt cgc cggtt aat cct	267		
Ala Asn Ser Glu Gly Asp Ala Leu Tyr Ala Leu Arg Arg Ser Leu Thr			
30	35	40	
gat cca gac cat gtc ctc cag agc tgg gat cca act ctt gtt aat cct	315		
Asp Pro Asp His Val Leu Gln Ser Trp Asp Pro Thr Leu Val Asn Pro			
45	50	55	

tgt acc tgg ttc cat gtc acc tgt aac caa gac aac cgc gtc act cgt 363
 Cys Thr Trp Phe His Val Thr Cys Asn Gln Asp Asn Arg Val Thr Arg
 60 65 70

 gtg gat ttg gga aat tca aac ctc tct gga cat ctt gcg cct gag ctt 411
 Val Asp Leu Gly Asn Ser Asn Leu Ser Gly His Leu Ala Pro Glu Leu
 75 80 85 90

 ggg aag ctt gaa cat tta cag tat cta gag ctc tac aaa aac aac atc 459
 Gly Lys Leu Glu His Leu Gln Tyr Leu Glu Leu Tyr Lys Asn Asn Ile
 95 100 105

 caa gga act ata cct tcc gaa ctt gga aat ctg aag aat ctc atc agc 507
 Gln Gly Thr Ile Pro Ser Glu Leu Gly Asn Leu Lys Asn Leu Ile Ser
 110 115 120

 ttg gat ctg tac aac aac aat ctt aca ggg ata gtt ccc act ttc ttg 555
 Leu Asp Leu Tyr Asn Asn Asn Leu Thr Gly Ile Val Pro Thr Phe Leu
 125 130 135

 gga aaa ttg aag tct ctg gtc ttt tta cgg ctt aat gac aac cga ttg 603
 Gly Lys Leu Lys Ser Leu Val Phe Leu Arg Leu Asn Asp Asn Arg Leu
 140 145 150

 acc ggt cca atc cta gag cac tca cgg caa tcc caa gcc ttt aaa gtt 651
 Thr Gly Pro Ile Leu Glu His Ser Arg Gln Ser Gln Ala Phe Lys Val
 155 160 165 170

 gtt gac gtc tca agc aat gat ttg tgt ggg aca atc cca aca aac gga 699
 Val Asp Val Ser Ser Asn Asp Leu Cys Gly Thr Ile Pro Thr Asn Gly
 175 180 185

 ccc ttt gct cac att cct tta cag aac ttt gag aac aac ccg aga ttg 747
 Pro Phe Ala His Ile Pro Leu Gln Asn Phe Glu Asn Asn Pro Arg Leu
 190 195 200

 gag gga ccg gaa tta ctc ggt ctt gca agc tac gac act aac tgc acc 795
 Glu Gly Pro Glu Leu Leu Gly Leu Ala Ser Tyr Asp Thr Asn Cys Thr
 205 210 215

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 accactttat caaatatcac atctattatg taataagtat atatatgtat taaaaacaaa 915
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Ala Leu Tyr Ala Leu Arg Arg Ser Leu Thr Asp Pro Asp His Val Leu
35 40 45
Gln Ser Trp Asp Pro Thr Leu Val Asn Pro Cys Thr Trp Phe His Val
50 55 60
Thr Cys Asn Gln Asp Asn Arg Val Thr Arg Val Asp Leu Gly Asn Ser
65 70 75 80
Asn Leu Ser Gly His Leu Ala Pro Glu Leu Gly Lys Leu Glu His Leu
85 90 95
Gln Tyr Leu Glu Leu Tyr Lys Asn Asn Ile Gln Gly Thr Ile Pro Ser
100 105 110
Glu Leu Gly Asn Leu Lys Asn Leu Ile Ser Leu Asp Leu Tyr Asn Asn
115 120 125
Asn Leu Thr Gly Ile Val Pro Thr Phe Leu Gly Lys Leu Lys Ser Leu
130 135 140
Val Phe Leu Arg Leu Asn Asp Asn Arg Leu Thr Gly Pro Ile Leu Glu
145 150 155 160
His Ser Arg Gln Ser Gln Ala Phe Lys Val Val Asp Val Ser Ser Asn
165 170 175
Asp Leu Cys Gly Thr Ile Pro Thr Asn Gly Pro Phe Ala His Ile Pro
180 185 190
Leu Gln Asn Phe Glu Asn Asn Pro Arg Leu Glu Gly Pro Glu Leu Leu
195 200 205
Gly Leu Ala Ser Tyr Asp Thr Asn Cys Thr
210 215

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215

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taataagtat atatatgttag taaaaacaaa aaaaatgaag aatcgaatcg gtaatatcat 907
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20 25 30

Ala Leu Tyr Ala Leu Arg Arg Ser Leu Thr Asp Pro Asp His Val Leu
35 40 45

Gln Ser Trp Asp Pro Thr Leu Val Asn Pro Cys Thr Trp Phe His Val
50 55 60

Thr Cys Asn Gln Asp Asn Arg Val Thr Arg Val Asp Leu Gly Asn Ser
65 70 75 80

Asn Leu Ser Gly His Leu Ala Pro Glu Leu Gly Lys Leu Glu His Leu
85 90 95

Gln Tyr Leu Glu Leu Tyr Lys Asn Asn Ile Gln Gly Thr Ile Pro Ser
100 105 110

Glu Leu Gly Asn Leu Lys Asn Leu Ile Ser Leu Asp Leu Tyr Asn Asn
115 120 125

Asn Leu Thr Gly Ile Val Pro Thr Ser Leu Gly Lys Leu Lys Ser Leu
130 135 140

Val Phe Leu Arg Leu Asn Asp Asn Arg Leu Thr Gly Pro Ile Pro Arg
145 150 155 160

Ala Leu Thr Ala Ile Pro Ser Leu Lys Val Val Asp Val Ser Ser Asn
165 170 175

Asp Leu Cys Gly Thr Ile Pro Thr Asn Gly Pro Phe Ala His Ile Pro
180 185 190

Leu Gln Asn Phe Glu Asn Asn Pro Arg Leu Glu Gly Pro Glu Leu Leu

195

200

205

Gly Leu Ala Ser Tyr Asp Thr Asn Cys Thr
 210 215

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<220>
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tta atc cta acc tta gct ttg att cac ctg gtc gaa gca aac tcc gaa 97
 Leu Ile Leu Thr Leu Ala Leu Ile His Leu Val Glu Ala Asn Ser Glu
 20 25 30

gga gat gct ctt tac gct ctt cgc cgg agt tta aca gat ccg gac cat 145
 Gly Asp Ala Leu Tyr Ala Leu Arg Arg Ser Leu Thr Asp Pro Asp His
 35 40 45

gtt ctc cag agc tgg gat cca act ctt gtt aat cct tgt acc tgg ttc 193
 Val Leu Gln Ser Trp Asp Pro Thr Leu Val Asn Pro Cys Thr Trp Phe
 50 55 60

cat gtc acc tgt aac caa gac aac cgc gtc act cgt gtg gat ttg ggg 241
 His Val Thr Cys Asn Gln Asp Asn Arg Val Thr Arg Val Asp Leu Gly
 65 70 75 80

aat tca aac ctc tct gga cat ctt gcg cct gag ctt ggg aag ctt gaa 289
 Asn Ser Asn Leu Ser Gly His Leu Ala Pro Glu Leu Gly Lys Leu Glu
 85 90 95

cat tta cag tat cta gag ctc tac aaa aac aac atc caa gga act ata 337
 His Leu Gln Tyr Leu Glu Leu Tyr Lys Asn Asn Ile Gln Gly Thr Ile
 100 105 110

cct tcc gaa ctt gga aat ctg aag aat ctc atc agc ttg gat ctg tac 385
 Pro Ser Glu Leu Gly Asn Leu Lys Asn Leu Ile Ser Leu Asp Leu Tyr
 115 120 125

aac aac aat ctt aca ggg ata gtt ccc act tct ttg gga aaa ttg aag 433
 Asn Asn Asn Leu Thr Gly Ile Val Pro Thr Ser Leu Gly Lys Leu Lys
 130 135 140

tct ctg gtc ttt tta cgg ctt aat gac aac cga ttg acg ggg cca atc 481
 Ser Leu Val Phe Leu Arg Leu Asn Asp Asn Arg Leu Thr Gly Pro Ile
 145 150 155 160

cct aga gca ctc act gca atc cca agc ctt aaa gtt gtt gat gtc tca	529	
Pro Arg Ala Leu Thr Ala Ile Pro Ser Leu Lys Val Val Asp Val Ser		
165 170 175		
agc aat gat ttg tgt gga aca atc cca aca aac gga cct ttt gct cac	577	
Ser Asn Asp Leu Cys Gly Thr Ile Pro Thr Asn Gly Pro Phe Ala His		
180 185 190		
att cct tta cag aac ttt gag aac aac ccg agg ttg gag gga ccg gaa	625	
Ile Pro Leu Gln Asn Phe Glu Asn Asn Pro Arg Leu Glu Gly Pro Glu		
195 200 205		
tta ctc ggt ctt gca agc tac gac act aac tgc acc tgaaaaaatt	671	
Leu Leu Gly Leu Ala Ser Tyr Asp Thr Asn Cys Thr		
210 215 220		
ggcaaaacct gaaaatgaag aattgggggg tgacctgta agaacacttc accacttat	731	
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Gly Asp Ala Leu Tyr Ala Leu Arg Arg Ser Leu Thr Asp Pro Asp His		
35 40 45		
Val Leu Gln Ser Trp Asp Pro Thr Leu Val Asn Pro Cys Thr Trp Phe		
50 55 60		
His Val Thr Cys Asn Gln Asp Asn Arg Val Thr Arg Val Asp Leu Gly		
65 70 75 80		
Asn Ser Asn Leu Ser Gly His Leu Ala Pro Glu Leu Gly Lys Leu Glu		
85 90 95		
His Leu Gln Tyr Leu Glu Leu Tyr Lys Asn Asn Ile Gln Gly Thr Ile		
100 105 110		
Pro Ser Glu Leu Gly Asn Leu Lys Asn Leu Ile Ser Leu Asp Leu Tyr		
115 120 125		
Asn Asn Asn Leu Thr Gly Ile Val Pro Thr Ser Leu Gly Lys Leu Lys		
130 135 140		
Ser Leu Val Phe Leu Arg Leu Asn Asp Asn Arg Leu Thr Gly Pro Ile		
145 150 155 160		

Pro Arg Ala Leu Thr Ala Ile Pro Ser Leu Lys Val Val Asp Val Ser
165 170 175

Ser Asn Asp Leu Cys Gly Thr Ile Pro Thr Asn Gly Pro Phe Ala His
180 185 190

Ile Pro Leu Gln Asn Phe Glu Asn Asn Pro Arg Leu Glu Gly Pro Glu
195 200 205

Leu Leu Gly Leu Ala Ser Tyr Asp Thr Asn Cys Thr
210 215 220

<210> 28

<211> 894

<212> DNA

<213> unknown

<220>

<221> CDS

<222> (1)..(675)

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agc tta tca gat cca gac aat gtt gtt cag agt tgg gat cca act ctt 96
Ser Leu Ser Asp Pro Asp Asn Val Val Gln Ser Trp Asp Pro Thr Leu
20 25 30

gtt aat cct tgt act tgg ttt cat gtc act tgt aat caa cac cat caa 144
Val Asn Pro Cys Thr Trp Phe His Val Thr Cys Asn Gln His His Gln
35 40 45

gtc act cgt ctg gat ttg ggg aat tca aac tta tct gga cat cta gta 192
Val Thr Arg Leu Asp Leu Gly Asn Ser Asn Leu Ser Gly His Leu Val
50 55 60

cct gaa ctt ggg aag ctt gaa cat tta caa tat ctg tat gga atc atc 240
Pro Glu Leu Gly Lys Leu Glu His Leu Gln Tyr Leu Tyr Gly Ile Ile
65 70 75 80

act ctt ttg cct ttt gat tat ctg aaa aca ttt aca tta tca gtc aca 288
Thr Leu Leu Pro Phe Asp Tyr Leu Lys Thr Phe Thr Leu Ser Val Thr
85 90 95

cat ata aca ttt tgc ttt gag tca tat agt gaa ctc tac aaa aac gag 336
His Ile Thr Phe Cys Phe Glu Ser Tyr Ser Glu Leu Tyr Lys Asn Glu
100 105 110

att caa gga act ata cct tct gag ctt gga aat ctg aag agt cta atc 384
Ile Gln Gly Thr Ile Pro Ser Glu Leu Gly Asn Leu Lys Ser Leu Ile
115 120 125

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Leu	Gly	Lys	Leu	Lys	Ser	Leu	Val	Phe	Leu	Arg	Leu	Asn	Glu	Asn	Arg	
145					150					155			160			
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Leu	Thr	Gly	Pro	Ile	Pro	Arg	Glu	Leu	Thr	Val	Ile	Ser	Ser	Leu	Lys	
165					170						175					
gtt	gtt	gat	gtc	tca	ggg	aat	gat	ttg	tgt	gga	aca	att	cca	gta	gaa	576
Val	Val	Asp	Val	Ser	Gly	Asn	Asp	Leu	Cys	Gly	Thr	Ile	Pro	Val	Glu	
180					185					190						
gga	cct	ttt	gaa	cac	att	cct	atg	caa	aac	ttt	gag	aac	aac	ctg	aga	624
Gly	Pro	Phe	Glu	His	Ile	Pro	Met	Gln	Asn	Phe	Glu	Asn	Asn	Leu	Arg	
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Leu	Glu	Gly	Pro	Glu	Leu	Leu	Gly	Leu	Ala	Ser	Tyr	Asp	Thr	Asn	Cys	
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Thr																
225																
gaactctgta	ccaagtgttt	gtaaaatctat	atagaggcatt	gtttcatgtt	atatatgaaa											785
gctttgagag	acagtaactt	gcaatgtatt	ggtattggta	gaaaaagttg	aaatgagaat											845
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									25			30				
Val	Asn	Pro	Cys	Thr	Trp	Phe	His	Val	Thr	Cys	Asn	Gln	His	His	Gln	
								35		40		45				
Val	Thr	Arg	Leu	Asp	Leu	Gly	Asn	Ser	Asn	Leu	Ser	Gly	His	Leu	Val	
								50		55		60				
Pro	Glu	Leu	Gly	Lys	Leu	Glu	His	Leu	Gln	Tyr	Leu	Tyr	Gly	Ile	Ile	
								65		70		75		80		
Thr	Leu	Leu	Pro	Phe	Asp	Tyr	Leu	Lys	Thr	Phe	Thr	Leu	Ser	Val	Thr	
								85		90		95				

His Ile Thr Phe Cys Phe Glu Ser Tyr Ser Glu Leu Tyr Lys Asn Glu
100 105 110

Ile Gln Gly Thr Ile Pro Ser Glu Leu Gly Asn Leu Lys Ser Leu Ile
115 120 125

Ser Leu Asp Leu Tyr Asn Asn Leu Thr Gly Lys Ile Pro Ser Ser
130 135 140

Leu Gly Lys Leu Lys Ser Leu Val Phe Leu Arg Leu Asn Glu Asn Arg
145 150 155 160

Leu Thr Gly Pro Ile Pro Arg Glu Leu Thr Val Ile Ser Ser Leu Lys
165 170 175

Val Val Asp Val Ser Gly Asn Asp Leu Cys Gly Thr Ile Pro Val Glu
180 185 190

Gly Pro Phe Glu His Ile Pro Met Gln Asn Phe Glu Asn Asn Leu Arg
195 200 205

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Thr
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caaattccta ttagattact ctctcttcga cctccgatag ctcac atg gcg tct cga 117
Met Ala Ser Arg
1

aac tat cgg tgg gag ctc ttc gca gct tcg tta atc cta acc tta gct 165
Asn Tyr Arg Trp Glu Leu Phe Ala Ala Ser Leu Ile Leu Thr Leu Ala
5 10 15 20

ttg att cac ctg gtc gaa gca aac tcc gaa gga gat gct ctt tac gct 213
Leu Ile His Leu Val Glu Ala Asn Ser Glu Gly Asp Ala Leu Tyr Ala
25 30 35

ctt cgc cggtt aca gat ccg gac cat gtt ctc cag agc tgg gat 261
Leu Arg Arg Ser Leu Thr Asp Pro Asp His Val Leu Gln Ser Trp Asp
40 45 50

cca act ctt gtt aat cct tgt acc tgg ttc cat gtc acc tgt aac caa	309
Pro Thr Leu Val Asn Pro Cys Thr Trp Phe His Val Thr Cys Asn Gln	
55 60 65	
gac aac cgc gtc act cgt gtg gat ttg ggg aat tca aac ctc tct gga	357
Asp Asn Arg Val Thr Arg Val Asp Leu Gly Asn Ser Asn Leu Ser Gly	
70 75 80	
cat ctt gcg cct gag ctt ggg aag ctt gaa cat tta cag tat cta gag	405
His Leu Ala Pro Glu Leu Gly Lys Leu Glu His Leu Gln Tyr Leu Glu	
85 90 95 100	
ctc tac aaa aac aac atc caa gga act ata cct tcc gaa ctt gga aat	453
Leu Tyr Lys Asn Asn Ile Gln Gly Thr Ile Pro Ser Glu Leu Gly Asn	
105 110 115	
ctg aag aat ctc atc agc ttg gat ctg tac aac aac aat ctt aca ggg	501
Leu Lys Asn Leu Ile Ser Leu Asp Leu Tyr Asn Asn Leu Thr Gly	
120 125 130	
ata gtt ccc act tct ttg gga aaa ttg aag tct ctg gtc ttt tta cgg	549
Ile Val Pro Thr Ser Leu Gly Lys Leu Lys Ser Leu Val Phe Leu Arg	
135 140 145	
ctt aat gac aac cga ttg acg ggg cca atc cct aga gca ctc act gca	597
Leu Asn Asp Asn Arg Leu Thr Gly Pro Ile Pro Arg Ala Leu Thr Ala	
150 155 160	
atc cca agc ctt aaa gtt gtt gat gtc tca agc aat gat ttg tgt gga	645
Ile Pro Ser Leu Lys Val Val Asp Val Ser Ser Asn Asp Leu Cys Gly	
165 170 175 180	
aca atc cca aca aac gga cct ttt gct cac att cct tta cag aac ttt	693
Thr Ile Pro Thr Asn Gly Pro Phe Ala His Ile Pro Leu Gln Asn Phe	
185 190 195	
gag aac aac ccg agg ttg gag gga ccg gaa tta ctc ggt ctt gca agc	741
Glu Asn Asn Pro Arg Leu Glu Gly Pro Glu Leu Leu Gly Leu Ala Ser	
200 205 210	
tac gac act aac tgc acc tgaaaaatt ggcaaaacct gaaaatgaag	789
Tyr Asp Thr Asn Cys Thr	
215	
aattgggggg tgaccttgta agaacacttc accactttat caaatatcac atctactatg	849
taataagtat atatatgttag tccaaaaaaaaaa aatgaagaa tcgaatcagt aatatcatct	909
ggtctcaatt gagaactttg aggtctgtgt atgtaaaatt tctaaatgcg actttcgct	969
actgtaatgt tcgggtgtgg gattctgaga agtaacattt gtattggat ggtatcaagt	1029
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Ala Leu Tyr Ala Leu Arg Arg Ser Leu Thr Asp Pro Asp His Val Leu
35 40 45
Gln Ser Trp Asp Pro Thr Leu Val Asn Pro Cys Thr Trp Phe His Val
50 55 60
Thr Cys Asn Gln Asp Asn Arg Val Thr Arg Val Asp Leu Gly Asn Ser
65 70 75 80
Asn Leu Ser Gly His Leu Ala Pro Glu Leu Gly Lys Leu Glu His Leu
85 90 95
Gln Tyr Leu Glu Leu Tyr Lys Asn Asn Ile Gln Gly Thr Ile Pro Ser
100 105 110
Glu Leu Gly Asn Leu Lys Asn Leu Ile Ser Leu Asp Leu Tyr Asn Asn
115 120 125
Asn Leu Thr Gly Ile Val Pro Thr Ser Leu Gly Lys Leu Lys Ser Leu
130 135 140
Val Phe Leu Arg Leu Asn Asp Asn Arg Leu Thr Gly Pro Ile Pro Arg
145 150 155 160
Ala Leu Thr Ala Ile Pro Ser Leu Lys Val Val Asp Val Ser Ser Asn
165 170 175
Asp Leu Cys Gly Thr Ile Pro Thr Asn Gly Pro Phe Ala His Ile Pro
180 185 190
Leu Gln Asn Phe Glu Asn Asn Pro Arg Leu Glu Gly Pro Glu Leu Leu
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Gly Leu Ala Ser Tyr Asp Thr Asn Cys Thr
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 attttcggaa gtttagggttt tctcgatct gaagagatca aatcaagatt cgaaatttac 180
 cattgttggtt tgaa atg gag tcg agt tat gtg gtg ttt atc tta ctt tca 230
 Met Glu Ser Ser Tyr Val Val Phe Ile Leu Leu Ser
 1 5 10
 ctg atc tta ctt ccg aat cat tca ctg tgg ctt gct tct gct aat ttg 278
 Leu Ile Leu Leu Pro Asn His Ser Leu Trp Leu Ala Ser Ala Asn Leu
 15 20 25
 gaa ggt gat gct ttg cat act ttg agg gtt act cta gtt gat cca aac 326
 Glu Gly Asp Ala Leu His Thr Leu Arg Val Thr Leu Val Asp Pro Asn
 30 35 40
 aat gtc ttg cag agc tgg gat cct acg cta gtg aat cct tgc aca tgg 374
 Asn Val Leu Gln Ser Trp Asp Pro Thr Leu Val Asn Pro Cys Thr Trp
 45 50 55 60
 ttc cat gtc act tgc aac aac gag aac agt gtc ata aga gtt gat ttg 422
 Phe His Val Thr Cys Asn Asn Glu Asn Ser Val Ile Arg Val Asp Leu
 65 70 75
 ggg aat gca gag tta tct ggc cat tta gtt cca gag ctt ggt gtg ctc 470
 Gly Asn Ala Glu Leu Ser Gly His Leu Val Pro Glu Leu Gly Val Leu
 80 85 90
 aag aat ttg cag tat ttg gag ctt tac agt aac aac ata act ggc ccg 518
 Lys Asn Leu Gln Tyr Leu Glu Leu Tyr Ser Asn Asn Ile Thr Gly Pro
 95 100 105
 att cct agt aat ctt gga aat ctg aca aac tta gtg agt ttg gat ctt 566
 Ile Pro Ser Asn Leu Gly Asn Leu Thr Asn Leu Val Ser Leu Asp Leu
 110 115 120
 tac tta aac agc ttc tcc ggt cct att ccg gaa tca ttg gga aag ctt 614
 Tyr Leu Asn Ser Phe Ser Gly Pro Ile Pro Glu Ser Leu Gly Lys Leu
 125 130 135 140
 tca aag ctg aga ttt ctc cgg ctt aac aac aac agt ctc act ggg tca 662
 Ser Lys Leu Arg Phe Leu Arg Leu Asn Asn Ser Leu Thr Gly Ser
 145 150 155
 att cct atg tca ctg acc aat att act acc ctt caa gtg tta gat cta 710
 Ile Pro Met Ser Leu Thr Asn Ile Thr Thr Leu Gln Val Leu Asp Leu
 160 165 170
 tca aat aac aga ctc tct ggt tca gtt cct gac aat ggc tcc ttc tca 758
 Ser Asn Asn Arg Leu Ser Gly Ser Val Pro Asp Asn Gly Ser Phe Ser
 175 180 185
 ctc ttc aca ccc atc agt ttt gct aat aac tta gac cta tgt gga cct 806

Leu Phe Thr Pro Ile Ser Phe Ala Asn Asn Leu Asp Leu Cys Gly Pro			
190	195	200	
gtt aca agt cac cca tgt cct gga tct ccc ccg ttt tct cct cca cca			854
Val Thr Ser His Pro Cys Pro Gly Ser Pro Pro Phe Ser Pro Pro Pro			
205	210	215	220
cct ttt att caa cct ccc cca gtt tcc acc ccg agt ggg tat ggt ata			902
Pro Phe Ile Gln Pro Pro Pro Val Ser Thr Pro Ser Gly Tyr Gly Ile			
225	230	235	
act gga gca ata gct ggt gga gtt gct gca ggt gct gct ttg ccc ttt			950
Thr Gly Ala Ile Ala Gly Gly Val Ala Ala Gly Ala Ala Leu Pro Phe			
240	245	250	
gct gct cct gca ata gcc ttt gct tgg tgg cga cga aga agc cca cta			998
Ala Ala Pro Ala Ile Ala Phe Ala Trp Trp Arg Arg Arg Ser Pro Leu			
255	260	265	
gat att ttc ttc gat gtc cct gcc gaa gaa gat cca gaa gtt cat ctg			1046
Asp Ile Phe Phe Asp Val Pro Ala Glu Glu Asp Pro Glu Val His Leu			
270	275	280	
gga cag ctc aag agg ttt tct ttg cgg gag cta caa gtg gcg agt gat			1094
Gly Gln Leu Lys Arg Phe Ser Leu Arg Glu Leu Gln Val Ala Ser Asp			
285	290	295	300
ggg ttt agt aac aag aac att ttg ggc aga ggt ggg ttt ggg aaa gtc			1142
Gly Phe Ser Asn Lys Asn Ile Leu Gly Arg Gly Phe Gly Lys Val			
305	310	315	
tac aag gga cgc ttg gca gac gga act ctt gtt gct gtc aag aga ctg			1190
Tyr Lys Gly Arg Leu Ala Asp Gly Thr Leu Val Ala Val Lys Arg Leu			
320	325	330	
aag gaa gag cga act cca ggt gga gag ctc cag ttt caa aca gaa gta			1238
Lys Glu Glu Arg Thr Pro Gly Gly Glu Leu Gln Phe Gln Thr Glu Val			
335	340	345	
gag atg ata agt atg gca gtt cat cga aac ctg ttg aga tta cga ggt			1286
Glu Met Ile Ser Met Ala Val His Arg Asn Leu Leu Arg Leu Arg Gly			
350	355	360	
ttc tgt atg aca ccg acc gag aga ttg ctt gtg tat cct tac atg gcc			1334
Phe Cys Met Thr Pro Thr Glu Arg Leu Leu Val Tyr Pro Tyr Met Ala			
365	370	375	380
aat gga agt gtt tcg tgt ctc aga gag agg cca ccg tca caa cct			1382
Asn Gly Ser Val Ala Ser Cys Leu Arg Glu Arg Pro Pro Ser Gln Pro			
385	390	395	
ccg ctt gat tgg cca acg ccg aag aga atc gcg cta ggc tca gct cga			1430
Pro Leu Asp Trp Pro Thr Arg Lys Arg Ile Ala Leu Gly Ser Ala Arg			
400	405	410	
ggt ttg tct tac cta cat gat cac tgc gat ccg aag atc att cac cgt			1478
Gly Leu Ser Tyr Leu His Asp His Cys Asp Pro Lys Ile Ile His Arg			

415	420	425	
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430	435	440	1526
gtt gga gat ttc ggg ttg gca aag ctt atg gac tat aaa gac act cac Val Gly Asp Phe Gly Leu Ala Lys Leu Met Asp Tyr Lys Asp Thr His			
445	450	455	1574
gtg aca aca gca gtc cgt ggc acc atc ggt cac atc gct cca gaa tat Val Thr Thr Ala Val Arg Gly Thr Ile Gly His Ile Ala Pro Glu Tyr			
465	470	475	1622
ctc tca acc gga aaa tct tca gag aaa acc gac gtt ttc gga tac gga Leu Ser Thr Gly Lys Ser Ser Glu Lys Thr Asp Val Phe Gly Tyr Gly			
480	485	490	1670
atc atg ctt cta gaa cta atc aca gga caa aga gct ttc gat ctc gct Ile Met Leu Leu Glu Leu Ile Thr Gly Gln Arg Ala Phe Asp Leu Ala			
495	500	505	1718
cg ^g cta gct aac gac gac gtc atg tta ctt gac tgg gtg aaa gga Arg Leu Ala Asn Asp Asp Val Met Leu Leu Asp Trp Val Lys Gly			
510	515	520	1766
ttg ttg aag gag aag aag cta gag atg tta gtg gat cca gat ctt caa Leu Leu Lys Glu Lys Lys Leu Glu Met Leu Val Asp Pro Asp Leu Gln			
525	530	535	1814
aca aac tac gag gag aga gaa ctg gaa caa gtg ata caa gtg gcg ttg Thr Asn Tyr Glu Glu Arg Glu Leu Glu Gln Val Ile Gln Val Ala Leu			
545	550	555	1862
cta tgc acg caa gga tca cca atg gaa aga cca aag atg tct gaa gtt Leu Cys Thr Gln Gly Ser Pro Met Glu Arg Pro Lys Met Ser Glu Val			
560	565	570	1910
gta agg atg ctg gaa gga gat ggg ctt gcg gag aaa tgg gac gaa tgg Val Arg Met Leu Glu Gly Asp Gly Leu Ala Glu Lys Trp Asp Glu Trp			
575	580	585	1958
caa aaa gtt gag att ttg agg gaa gag att gat ttg agt cct aat cct Gln Lys Val Glu Ile Leu Arg Glu Glu Ile Asp Leu Ser Pro Asn Pro			
590	595	600	2006
aac tct gat tgg att ctt gat tct act tac aat ttg cac gcc gtt gag Asn Ser Asp Trp Ile Leu Asp Ser Thr Tyr Asn Leu His Ala Val Glu			
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Leu Ser Gly Pro Arg			2089
625			

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<212> PRT

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Leu His Thr Leu Arg Val Thr Leu Val Asp Pro Asn Asn Val Leu Gln
35 40 45
Ser Trp Asp Pro Thr Leu Val Asn Pro Cys Thr Trp Phe His Val Thr
50 55 60
Cys Asn Asn Glu Asn Ser Val Ile Arg Val Asp Leu Gly Asn Ala Glu
65 70 75 80
Leu Ser Gly His Leu Val Pro Glu Leu Gly Val Leu Lys Asn Leu Gln
85 90 95
Tyr Leu Glu Leu Tyr Ser Asn Asn Ile Thr Gly Pro Ile Pro Ser Asn
100 105 110
Leu Gly Asn Leu Thr Asn Leu Val Ser Leu Asp Leu Tyr Leu Asn Ser
115 120 125
Phe Ser Gly Pro Ile Pro Glu Ser Leu Gly Lys Leu Ser Lys Leu Arg
130 135 140
Phe Leu Arg Leu Asn Asn Asn Ser Leu Thr Gly Ser Ile Pro Met Ser
145 150 155 160
Leu Thr Asn Ile Thr Thr Leu Gln Val Leu Asp Leu Ser Asn Arg
165 170 175
Leu Ser Gly Ser Val Pro Asp Asn Gly Ser Phe Ser Leu Phe Thr Pro
180 185 190
Ile Ser Phe Ala Asn Asn Leu Asp Leu Cys Gly Pro Val Thr Ser His
195 200 205
Pro Cys Pro Gly Ser Pro Pro Phe Ser Pro Pro Pro Phe Ile Gln
210 215 220
Pro Pro Pro Val Ser Thr Pro Ser Gly Tyr Ile Thr Gly Ala Ile
225 230 235 240
Ala Gly Gly Val Ala Ala Gly Ala Ala Leu Pro Phe Ala Ala Pro Ala
245 250 255
Ile Ala Phe Ala Trp Trp Arg Arg Arg Ser Pro Leu Asp Ile Phe Phe
260 265 270
Asp Val Pro Ala Glu Glu Asp Pro Glu Val His Leu Gly Gln Leu Lys
275 280 285

Arg Phe Ser Leu Arg Glu Leu Gln Val Ala Ser Asp Gly Phe Ser Asn
290 295 300

Lys Asn Ile Leu Gly Arg Gly Gly Phe Gly Lys Val Tyr Lys Gly Arg
305 310 315 320

Leu Ala Asp Gly Thr Leu Val Ala Val Lys Arg Leu Lys Glu Glu Arg
325 330 335

Thr Pro Gly Gly Glu Leu Gln Phe Gln Thr Glu Val Glu Met Ile Ser
340 345 350

Met Ala Val His Arg Asn Leu Leu Arg Leu Arg Gly Phe Cys Met Thr
355 360 365

Pro Thr Glu Arg Leu Leu Val Tyr Pro Tyr Met Ala Asn Gly Ser Val
370 375 380

Ala Ser Cys Leu Arg Glu Arg Pro Pro Ser Gln Pro Pro Leu Asp Trp
385 390 395 400

Pro Thr Arg Lys Arg Ile Ala Leu Gly Ser Ala Arg Gly Leu Ser Tyr
405 410 415

Leu His Asp His Cys Asp Pro Lys Ile Ile His Arg Asp Val Lys Ala
420 425 430

Ala Asn Ile Leu Leu Asp Glu Glu Phe Glu Ala Val Val Gly Asp Phe
435 440 445

Gly Leu Ala Lys Leu Met Asp Tyr Lys Asp Thr His Val Thr Thr Ala
450 455 460

Val Arg Gly Thr Ile Gly His Ile Ala Pro Glu Tyr Leu Ser Thr Gly
465 470 475 480

Lys Ser Ser Glu Lys Thr Asp Val Phe Gly Tyr Gly Ile Met Leu Leu
485 490 495

Glu Leu Ile Thr Gly Gln Arg Ala Phe Asp Leu Ala Arg Leu Ala Asn
500 505 510

Asp Asp Asp Val Met Leu Leu Asp Trp Val Lys Gly Leu Leu Lys Glu
515 520 525

Lys Lys Leu Glu Met Leu Val Asp Pro Asp Leu Gln Thr Asn Tyr Glu
530 535 540 545

Glu Arg Glu Leu Glu Gln Val Ile Gln Val Ala Leu Leu Cys Thr Gln
545 550 555 560

Gly Ser Pro Met Glu Arg Pro Lys Met Ser Glu Val Val Arg Met Leu
565 570 575

Glu Gly Asp Gly Leu Ala Glu Lys Trp Asp Glu Trp Gln Lys Val Glu
580 585 590

Ile Leu Arg Glu Glu Ile Asp Leu Ser Pro Asn Pro Asn Ser Asp Trp
595 600 605

Ile Leu Asp Ser Thr Tyr Asn Leu His Ala Val Glu Leu Ser Gly Pro
610 615 620

Arg
625